

### Abstract

A heterogeneous wireless network topology suited for low-power, short-range and ubiquitous ad-hoc communication. The network topology integrates different wireless transmission technologies, in particular to a wireless sensor network including different node types and communication technologies. The network is highly heterogeneous and can be operated according to the master-slave principle. The nodes can have different wireless communication means tailored to their individual role in the network and other constraints, thus allowing different communication patterns.